

(11)Publication number:

03-135011

(43) Date of publication of application: 10.06.1991

(51)Int.CI.

H01L 21/027 B05D 3/02

(21)Application number : **01-273599** 

(71)Applicant: TOKYO ELECTRON LTD

TOKYO EREKUTORON KYUSHU

KK ·

(22)Date of filing:

20.10.1989

(72)Inventor: HIRAKAWA OSAMU

**FUJIMOTO AKIHIRO** 

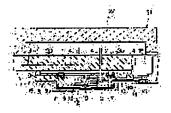
TERAOKA SEIICHI

## (54) HEATING TREATMENT FOR SUBSTRATE

(57)Abstract:

PURPOSE: To make an apparatus small-sized by a method wherein, when a substrate to be treated is heattreated by using heat of a heating plate at a second temperature after a heat treatment at a first temperature, an interval between the heating plate and the substrate to be treated is changed and the substrate is set to the second treatment temperature.

CONSTITUTION: A heating plate 2 is set in advance to a prescribed temperature; in a stage that pins 4 protrude on the heating plate 2, a semiconductor wafer 3 is placed on the pins 4. Then, the pins 4 are lowered; the wafer 3 is placed on proximity pins 20. A heating operation is executed for a prescribed time; a stepping motor 15 is driven; the pins 4 are raised; the wafer 3 is





delivered from the pins 20 to the pins 4; a proximity gap is set to a prescribed value; a heating operation is executed for a prescribed time. When a treatment temperature is to be changed further, the pins 4 are moved up and down, and the proximity gap is changed and adjusted. Thereby, the treatment temperature of the semiconductor wafer 2 can be set to a desired temperature without changing a temperature of a heating plate 1.

Searching PAJ Page 2 of 2

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office